May 11, 2016

Ms. Lisa Kasianowitz Houston Parks Board 300 North Post Oak Lane Houston, Texas 77024

Dear Lisa,

Enclosed are my personal comments about the Hogg Bird Sanctuary (HBS) Master Plan (MP).

Regarding the "Hogg Bird Sanctuary: A bird habitat enhancement plan," that was prepared by Rice University students and project leaders I have the following comments:

- 1) **II. Site Description,** the HBS is not "part of the Memorial Park Conservancy". It is a separate piece of land owned by the City of Houston (COH) with its own goals and objectives that has been folded into the Memorial Park Master Plan.
- 2) **IV. Existing Vegetation,** it is of concern that plants were only identified during the spring of 2015. At least one full year of botanical surveys (more than one year would be better) is needed to determine plants on the site. Without a full, seasonal set of botanical surveys, plant species may be missed which are important and should be protected by the proposed MP. I urge that additional seasonal botanical surveys be conducted in the HBS before the MP is implemented.

In addition, it is not clear what the competency and experience is of the project leaders and students with regard to botanical surveys. A professional botanist should be used to determine what plants live in the HBS. The importance of the HBS makes it crucial that the plant surveys be done by a competent professional. Since it appears that about \$2 million will be spent on the MP a few thousand dollars more to hire a competent professional botanist is not asking much. Please do this.

- 3) **Northern Strip,** the report states that "Lantana plants ... while these are technically not native, we see no problem in leaving a few". If Lantanas will be left or planted in the HBS, a native Lantana is available and should be used. There is no "technically not native". Something is or is not a native plant to an area. Even the native Lantana may not be native to the Houston Area but at least it evolved in a similar climate than non-native Lantana. The non-native Lantanas are known to be very competitive and could spread throughout the HBS.
- 4) **Northeastern Strip**, the report refers to a "water seep" that may come from a swimming pool or plumbing leak (II. Site Description). If this is true then the

COH should notify the neighbor so that the leak is stopped. Water conservation is important in the COH and the Houston Parks and Recreation Department (HPARD) should be a leader in this area and not allow the waste of this precious resource.

- 5) **Table 1. Current plant species list for Hogg Bird Sanctuary, Vines,** the report refers to Mustang Grape as "abundant invasive in the bottomlands". Before using the term "invasive" the authors should state what this word means with regard to the botanical elements in the HBS. One person's "invasive" is another person's "just making a living".
- 6) **V. Birdlife,** I find it of concern that the "midstory" is not recognized with regard to "bird habitat". Midstory trees (those about 20 to 40 feet tall) provide an additional layer of vertical and horizontal (tree limbs) structure where birds can eat, nest, and perch. There should be a discussion about the "midstory" and its role in the HBS and whether it will be restored in the MP.
- 7) **Guiding philosophy,** I do not support "construct a diverse ecosystem". Humans cannot construct ecosystems. They can rearrange some of the elements but only Nature, God, or the laws of ecology and physics can actually construct an ecosystem. We are gardening and not creating.
- 8) **Shrub-forest edge habitat**, I caution the use of the Baccharis shrub because it grows readily in prairies and eventually shades out native grasses and herbaceous vegetation. Since the COH has difficulty taking care of existing needs it is important to plan these planting so they are not difficult to maintain.
- 9)) Shrub-forest edge habitat, Red Mulberry (Morus rubra) is listed as a tree to be planted in HBS. I recommend that the COH makes sure that the mulberry trees that will be planted are indeed Red Mulberry. Many people mistake or misidentify non-native mulberry species, like White Mulberry (Morus alba) or Paper Mulberry (Broussonetia papyrifera) for Red Mulberry. Most of the mulberries in Memorial Park and along our bayous are not Red Mulberry. Those who provide Red Mulberries can get it wrong and plant a non-native mulberry. Be sure you have someone who can identify native Red Mulberries so the right tree is planted.
- 10)**Shrub-forest edge habitat,** the American Basswood is identified as an "understory tree". This is incorrect. The American Basswood is an overstory tree which can reach 75 to 130 feet in height. American Basswood may or may not be native to the Houston Area. Usually, the Carolina Basswood is listed as the basswood that is native to the Houston Area. A botanist should be consulted about this so that the correct native tree species is identified and used.
- 11) **Shrub-forest edge habitat,** the Mexican Turk's Cap is referred to as "seminative". Either this plant species is native to the Houston Area or it is not. Only

the Drummond's Turk's Camp should be used for planting since it is native and has evolved with birds here. If we do not need to, we should not plant non-native plants.

- 12) **Native prairie and wildflower habitat**, the report refers to the native prairie as "The amount of space allotted for a native prairie habitat is too small". The report should state clearly how large the prairie area will be so the public knows.
- 13) **Native prairie and wildflower habitat,** Maximillian Sunflower and Common Sunflower, are not "medium" in size wildflowers but are "tall" wildflowers.
- 14) **Native prairie and wildflower habitat,** the report refers to the planting of "Goldenrod", "Aster", Gayfeather/Blazing Star", "Sneezeweed", and "Coneflower". The report should state what type or types of "Goldenrod", "Aster", Gayfeather/Blazing Star", "Sneezeweed", and "Coneflower" will be planted.
- 15) **Native prairie and wildflower habitat**, Butterfly Weed has "orange" and not "pink" flowers.
- 16) **Native prairie and wildflower habitat,** I question whether "Dayflower" needs to be planted in the HBS. In the Houston Area, "Dayflower" spreads well on its own.
- 17) **Hummingbird habitat, Native plants,** "Buttonbush" has been misspelled "buttonbrush". This is a shrub or small understory tree.
- 18) **Hummingbird habitat, Native plants,** Maximillian Sunflower is not a "medium" size wildflower but is a "tall" wildflower.
- 19) **Hummingbird habitat, Native plants,** Tropical Milkweed (Mexican Milkweed) is not native to the Houston Area. This plant is a resident of Mexico that has been transplanted here. Native milkweeds should be used because these are the plants that evolved in our area and Mexican Milkweed can overgrow most herbaceous native plants.
- 20) **Hummingbird habitat, Native plants,** Blue Mist Flower often overgrows many prairie and other native plants. Care should be taken where this species is planted. It may require a lot of maintenance to keep it from overgrowing other plants in places where it is not wanted.
- 21) **Northern Strip and Western Area,** for the Northern Strip the report states "it is unclear where the sanctuary ends and the residential homes begin". This is also true for the Western Area where homeowners have been trespassing, mowing, and landscaping on the HBS for many years. Unfortunately, the HPARD has not stopped these illegal actions.

Since it appears that about \$2 million will be spent on the MP a few thousand dollars more to hire a competent professional surveyor to delineate the boundaries of the HBS with monuments is not asking much. Please do this and then require that the citizens who have trespassed onto HBS cease, that the COH reclaim the HBS that has been illegally used for years, and then that the COH restore these areas to native forest. I do not support installation of a fence. People should have access but they should not be allowed to trespass.

22) **Invasive removal and preservation of existing plants,** it appears that the Western Area is being left alone. I strongly support non-native invasive plant species (NNIPS) removal from this area so that it does not serve as a reserve to allow further movement of NNIPS into the Northern Strip, Northeastern Strip, and Southern Bottomlands.

I support removal of NNIPS throughout the entire HBS, wherever they exist, unless their removal would cause greater damage than leaving them in place. With regard to the "western ravine" and the proposed non-removal of golden raintrees, I suggest that the raintrees be cut, the stumps left in place and treated with herbicide, and that native trees be planted in the steep slopes to stabilize them.

If we want to restore the ecosystems of HBS then NNIPS and tree species that are native but not to our area should not be planted. I hope the the MP will ensure that these non-native species are not planted in the HBS. There are plenty of native plant and tree species that produce food and shelter for birds so there is no need to plant any NNIPS. This is a major failing of this MP that should be corrected.

23) I continue to be concerned about the removal of Cherry Laurel without any plan about where, how much, and why this should be done. As I have stated before, Carolina Cherry Laurel and Yaupon Holly are two native trees species that successfully compete with NNIPS, especially non-native privet species. Removal of these two native species before data is collected and reproduction of native plant and trees after removal of NNIPS is assessed may result in an increase of NNIPS from seed-bank germination. A more measured approach regarding removal of native species is called for or a problem that was not anticipated may be caused.

The large population of Carolina Cherry Laurel in some areas (particularly near Buffalo Bayou) may in part be due to the sandy soils (acidic to neutral) that this tree species prefers. The Ladybird Johnston Wildflower Center says the following about soils for Carolina Cherry Laurel, "Moist, deep, loamy, well drained soils. Clay Loam, Medium Loam, Sandy Loam, Sandy." The Carolina Cherry Laurel provides important soil erosion control for these sandier soils.

Regarding the Hogg Bird Sanctuary Public Update Meeting, May 9, 2016 Power Point presentation I have the following comments:

- 1) **Analysis Summary, Ecology, Plant Communities,** this page refers to the percentage of exotic invasive plants and native invasive plants in the overstory, midstory, and understory. However, the presentation does not state which NNIPS and native invasive plants it refers to under each category. The public must have this information so that it can review, comment on, and understand the effects of the MP.
- 2) **Species Observations, Sample List,** this bird list compilation does not clearly state how many years and what the sources of information are. It is my understanding that the Houston Audubon Society has conducted bird surveys and compiled a list for many years (not just a few). This is the best information that we currently have, year in and out, about what birds regularly visit or use the HBS seasonally.
- 3) **Species Observations**, this page has a list of birds that are resident species and stopover species. The Monk Parakeet is listed as a Stopover species. The Monk Parakeet is a migratory species. In addition, it is a non-native species that should not be purposefully managed for in the MP.
- 4) Bayou Influences, No Intervention, Stages 1, 2 and 3, this series of pages appear to be placed here to alarm people. There is nothing wrong with a stream changing course due to either human or natural conditions. I do not support the Memorial Park Demonstration Project and its attempt to manipulate a natural stream. The reason for most of the changes in Buffalo Bayou is due to urbanization, resulting run-off from excessive impervious surface, and the operation of the Addicks/Barker Reservoirs via heavy downstream releases (cfs). I do not care if more wetlands or open water are created and the so-called island disappears. If this is what is necessary for Buffalo Bayou to naturally react to heavy human impacts then so be it. We should not attempt to garden and stabilize areas where natural ecological processes and functions operate and will change the area inherently; where these changes are expected; and where these areas are dynamic.
- 5) **Opportunities and Constraints, Existing Conditions Imagery,** this page, where the outfall photo is shown, documents, in part, why erosion occurs at this location. The outfall, instead of being placed within the stream channel is above it and therefore water coming from the outfall creates turbulence and erosion and sedimentation downstream. If the erosion at this location were to be reduced then the outfall would need to be relocated within the channel with no free-fall height for water released from the outfall.
- 6) **Draft Recommendations, Program Plan,** this page refers to Habitat/Forest Improvements and Drainage Improvements, but does not state what these improvements are and the areas where they will be implemented. The public must

have this information so that it can review, comment on, and understand the effects of this proposal.

- 7) **Draft Recommendations, Human Activity,** I do not see the need for a "Sculpture" in a bird sanctuary. This appears unnecessary and an unneeded expense.
- 8) **Draft Recommendations, Forest Management Plan, Pathways to Forest Health,** the HBS MP should clearly state what "Selective Cutting" and "Brush Cutting" means, where it will be done, and how large an area will be affected. I support removing NNIPS but not native trees. The MP should also state clearly how these actions will affect "Forest Health" and what it means when it uses the term "Forest Health" (what are the conditions and goals that this term is defined as for the MP).
- 9) **Draft Recommendations, Forest Composition,** I am concerned that Tupelo (I assume this is Water Tupelo), Swamp Chestnut Oak, and Red Maple did not grow naturally on this part of Buffalo Bayou and therefore should not be planted in the HBS. I have enclosed several pages from "Silvics of North American, Volume 2. Hardwoods", which provides maps that document that these tree species did not occur on Buffalo Bayou at the HBS location. I suspect that the consultant either does not know this or has proposed these tree species because they are readily available and are less expensive to acquire and plant. This type of action which results in the planting of native species, off-site geographically from where they naturally occur, is not appropriate on ecological and evolutionary grounds. These three tree species should not be planted in the HBS.

I appreciate this opportunity to comment. Thank you.

Sincerely,

Brandt Mannchen